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SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL ASSESSMENT

October 17, 2017

Valmichael Leos, Remedial Project Manager
U.S. Environmental Protection Agency Region 6
1445 Ross Avenue, 6FS-OS
Dallas, Texas 75214

RE: Remedial Investigation/Feasibility Study Work Plan – LDEQ Comments
SBA Shipyard Superfund Site; **AI Number 1478**
9040 Castex landing Road
Jennings, Jefferson Davis Parish, LA

Dear Mr. Leos,

The Louisiana Department of Environmental Quality-Remediation Division (LDEQ-RS) has completed its review of the Remedial Investigation Feasibility Study Work Plan for the SBA Shipyard Superfund Site in Jennings, Jefferson Davis Parish, Louisiana (AI:1478), prepared for the SBA Shipyard PRP Group by EHS Support. Thank you for this information. Attached are the comments to the above-referenced document to incorporate into the EPA comments. Our comments are included to ensure that the PRP group will be in compliance with LDEQ regulations according to the latest edition of our Risk Evaluation Corrective Action Program (RECAP, 2003).

All future correspondence from the PRP group must include the **AI number** and be submitted in triplicate to:

Percy V. Harris, Administrator
Remediation Services Division
P.O. Box 4314
Baton Rouge, LA 70821-4314

If you have any questions, please feel free to contact me via email at tommy.doran@la.gov or by phone at (225)219-3019.

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Hugh J. Doran, Jr.".

Hugh "Tommy" Doran, Jr., Environmental Scientist 3
Remediation Division

Attachment: Technical Review Comments
c: Imaging Operations – IAS
Blake Atkins, USEPA Region 6 Superfund



TECHNICAL REVIEW COMMENT
SBA SHIPYARD SUPERFUND SITE (AI:1478)
RI/FS WORK PLAN

Section 3.2.1, Page 11

Reference:

"The field geologist will describe the general soil lithology; screen the sample with a photoionization detector (PID),"

Comment:

All PID Screening should be conducted in accordance with RECAP Appendix B (Section B2.5.2 Soil Investigations. Page B-8)

Reference:

"A representative sample will be collected at each boring location for PAHs, target analyte list (TAL) metals, geochemical, and physical property analyses."

Comment:

Also sample for VOCs and SVOCS in addition to PAHs

Section 3.2.2 Judgmental Samples, Page 12

Reference:

"Soil samples will be collected from up to three depth intervals for chemical analyses, geochemical, and physical parameters, as summarized on Table 1"

1. Surface Soil – 0 to 1.0 foot bgs

2. Subsurface Soil – area of highest PID reading. If no PID readings are registered the sample will be taken from a zone of exhibiting evidence of impacts via visual or olfactory observation.

3. Lower Bound Soil – 1.0 ft interval directly below area of observed contamination (as determined by PID readings or visual indicators) or 1.0 ft interval directly above the encountered water table if evidence of impacts extends into groundwater."

Comment:

Soil samples should also be collected for analysis at:

- 1) Soil-groundwater interface
- 2) Total Depth of the boring
- 3) Highest PID reading, if different from #1 and #2

Section 3.2.4 Asphaltic Surficial Material Characterization, Page 14

Reference:

“Samples will be analyzed for VOCs, PAHs, Total Petroleum Hydrocarbons (TPH) – Volatile Petroleum Hydrocarbons (VPH), and TPH – Extractable Petroleum Hydrocarbons (EPH).”

Comment:

Please include SVOCs in addition to PAHs

Section 3.3.1.1 Sampling Design, Page 15

Reference:

“Samples from the Barge Cleaning Area Drainage Ditch and Southern Wetland Area will be collected from the surface interval (0-0.5-ft).

The 0-0.5-ft surface sampling interval generally represents the biologically active zone (BAZ) of sediment, where the greatest biological activity is likely to occur (see Appendix A; USEPA, 2015b). This surface interval will be sampled and analyzed for site-related constituents to characterize potential ecological and human health exposure to sediment (see Appendix A).”

Comment:

The 2 most commonly occurring species of crayfish to south Louisiana (*Procambarus clarkii* and *P. zonangulus*) typically burrow to depths of 1-3 ft bgs, (Coastal Protection and Restoration Authority 2017, Coastal Master Plan, Attachment C3-19: Crayfish, *Procambarus clarkii* and *P. zonangulus*, Habitat Suitability Index Model) (http://coastal.la.gov/wp-content/uploads/2016/04/Attachment-C3-19-Crayfish-HIS_July-2016.pdf).

Sample interval should be 0-3 ft bgs since such burrows provide a direct open vertical conduit for COCs to migrate. There should be 2 separate intervals for VOCs (0-2' and 2'-4' bgs) so as not to consider the samples as composites.

Section 3.3.2 Surface Water – Page 17

Reference:

“in situ water quality parameters will include dissolved oxygen (DO), specific conductivity, temperature, ORP, and pH.”

Comment:

Add salinity to the list of water quality parameters. Due to season and tidal influences, the waters adjacent to this site location can at times be considered estuarine, and the water column will be stratified by this parameter.

3.4.1 Monitoring Well Installation – Page 18

Reference:

“Using equipment capable of both direct push and hollow stem auguring, a boring will be advanced fifteen feet beyond the observed saturated interface. Soil cores will be logged for lithology in accordance with USCS guidance and will document additional information including the recovery length, presence of fill and/or native material, staining/discoloration, odors, the presence of groundwater or perched water, the presence of NAPL, and PID readings. PID readings will be collected in one-foot intervals throughout the boring.”

Comment:

According to Section B2.5.2 of RECAP: At a minimum a soil sample from each boring shall be collected from the:

1. Soil-groundwater interface (for light non-aqueous phase liquids)
2. Total depth of the boring.
3. Highest PID reading, if different from #1 and #2

Groundwater analytical samples will be VOCs, SVOCs, metals (unfiltered), and geochemical and physical parameters in accordance with **Table 4**. It is envisioned that a minimum of four quarterly sampling events will be conducted during the initial phase of the RI to assess possible seasonal changes in groundwater quality.

3.4.4 Non-Aqueous Phase Liquids Characterization – Page 19

Reference:

*“Based on historical information, light non-aqueous phase liquids (LNAPL) is anticipated to be encountered during subsurface investigation activities. LNAPL is currently present in existing monitoring well MW-2 and, as described in **Section 3.4.1**, an additional monitoring well is proposed in that area to confirm the presence of LNAPL. RI activities will include sampling of LNAPL from existing monitoring well MW-2 to determine the chemical and physical characteristics of the LNAPL. If LNAPL accumulates in other monitoring wells, a sample will also be collected from those wells to determine if characteristics are different than those at MW-2. LNAPL characterization analyses will include VOCs, SVOCs, total petroleum hydrocarbons – volatile petroleum hydrocarbons (TPH-VPH) and total petroleum hydrocarbons – extractable petroleum hydrocarbons (TPH-EPH), density, viscosity, and interfacial tension.”*

Comment:

If NAPL is discovered, continuous quarterly sampling of that well following the initial sampling is not advised unless no other wells are nearby.

As per Appendix B Section B2.5.11 of RECAP (2003): Where NAPL is present, wells containing NAPL should be gauged but not sampled unless specifically directed to do so by the Department in order to identify a source of release or constituent of concern.

3.4.5 Slug Tests and Aquifer Characterization – Page 19

Comment:

Using data collected from Slug Tests and Aquifer Characterization, please classify the groundwater in accordance with RECAP (2003) Section 2.10.

3.5.1 Surface Soils – Page 21

Reference:

“Background surface soil samples are proposed to be analyzed for PAHs and TAL metals.”

Comment:

Background Surface Soil samples shall also be analyzed for VOCs and SVOCs in addition to PAHs.

3.7.1.4 Toxicity Assessment – Page 26

Reference:

“Sources of toxicity values in order of preference are as follows:

- *USEPA Integrated Risk Information System (IRIS)*
- *Provisional peer-reviewed reference toxicity values (PPRTVs)*
- *Agency for Toxic Substances and Disease Registry’s Minimal Risk Levels*
- *California Environmental Protection Agency Office of Environmental Health Hazard Assessment (OEHHA) risk assessment health values*
- *Other sources (screening values from “PPRTV Appendix” sources and other specific individual toxicity values and EPA Superfund program's Health Effects Assessment Summary Table)”*

Comment:

It is suggested that this hierarchy of toxicity of assessment resources follow this order of preference:

- USEPA Integrated Risk Information System (IRIS)
- Provisional peer-reviewed reference toxicity values (PPRTVs)
- Health Effects Assessment Summary Tables (HEAST)
- EPA Mid-Atlantic Regional Risk Assessment
- Other sources (ATSDR, California)